

# U.S. Army Center for Health Promotion and Preventive Medicine

---

## A SOLDIER'S GUIDE TO STAYING HEALTHY IN THE BALKANS

SHG 008-0302



[Staying Healthy Guides](#)

DISTRIBUTION: UNLIMITED

---

# A SOLDIER'S GUIDE TO STAYING HEALTHY IN THE BALKANS

## Table of Contents

	Page
INTRODUCTION.....	1
THE BALKANS OVERVIEW .....	2
THE BALKANS RISK ASSESSMENT .....	2
INCREASED REGIONAL DISEASE THREATS.....	3
FIELD SANITATION TEAM.....	3
FOOD-BORNE AND WATER-BORNE DISEASES.....	3
VECTOR-BORNE DISEASES .....	3
HOT AND COLD WEATHER INJURIES .....	4
WIND AND DUST .....	4
HIGH ELEVATIONS .....	5
HAZARDOUS ANIMALS AND PLANTS.....	5
TOXIC INDUSTRIAL CHEMICALS AND MATERIALS.....	6
SKIN DISEASES .....	6
SEXUALLY TRANSMITTED DISEASES .....	6
HEARING PROTECTION .....	6
ORAL HEALTH .....	6
PRE-DEPLOYMENT HEALTH INFORMATION .....	7
INFORMATION ABOUT YOUR HEALTH CARE WHILE DEPLOYED .....	7
POST-DEPLOYMENT HEALTH INFORMATION.....	7

## INTRODUCTION

This country-specific guide should be used in conjunction with [GTA 08-05-062, \*Guide to Staying Healthy\*](#), and is intended to provide information that can help reduce your risk of Disease and Non-battle Injuries (DNBI) when deployed. This health threat and countermeasure information is based on the most current data available from U.S. Department of Defense medical agencies at the time of production. In addition to the information in this guide, you should also receive force health protection, health threat, and preventive medicine countermeasures training/briefings prior to and, as required, throughout the length of your deployment.

---

## THE BALKANS OVERVIEW

The Balkan Peninsula includes the countries of [Albania](#), [Bosnia/Herzegovina](#), [Bulgaria](#), [Croatia](#), [Greece](#), [Macedonia](#), [Romania](#), [Serbia/Montenegro/Kosovo](#) (the former Yugoslavia), and [Slovenia](#). (Although Turkey may be considered a Balkan state, it is not included in this guide.) The Balkans region is composed mostly of rugged mountain ranges with a few flat or rolling coastal and inland plains. The borders of the region include Austria, Hungary and Ukraine in the north, Italy and the Adriatic and Ionian Seas in the west, the Mediterranean and Aegean Seas in the south, and Turkey and the Black Sea in the east. The elevation ranges from sea level along the Adriatic, Black and Mediterranean Seas to nearly 9,600 feet in the Rila Mountains of Bulgaria. The climate is generally temperate with cold winters and hot, humid summers inland and mild winters and dry summers along the coast. Summer temperatures average between a low of 52° F and a high of 84° F. The winter temperatures generally average between a low of 28° F and a high of 57° F, although the mountainous regions are much colder with snow possible year-round. This region contains some of the wettest areas in Europe during the winter with an annual rainfall of more than 100 inches in the mountainous areas. Severe thunderstorms and flooding occur in the region. Cyclones are common during the winter in Albania, and tsunamis can occur along the southwestern coast. Destructive earthquakes occur throughout the region, and landslides have occurred in Bulgaria and Romania

## THE BALKANS RISK ASSESSMENT

Based on a combination of all major infectious diseases that occur in a country, an [overall country risk level](#) is assigned as low, intermediate, high, or highest risk. The majority of this region is INTERMEDIATE RISK except for Greece, which is LOW RISK for infectious diseases. Diseases of military importance to forces deployed to the Balkans include [hepatitis A and E](#), [typhoid fever](#), and several diarrheal diseases to include [cholera](#), all acquired by consuming contaminated food, water, and dairy products; vector-borne diseases such as [sandfly fever](#), [leishmaniasis](#), [West Nile fever](#), [Crimean-Congo hemorrhagic fever](#), [tick-borne encephalitis](#), [Lyme disease](#), and [murine typhus](#) which are acquired through the bites of insects or ticks; [rabies](#) from animal contact; [tuberculosis](#) from contact with human respiratory secretions or droplets; [hantavirus hemorrhagic fever with renal syndrome](#) from inhaling dust contaminated with rodent urine or excrement; [tularemia](#) (transmitted in multiple ways) from eating infected meat, drinking water contaminated by infected animals, inhaling contaminated dust, or from direct animal contact, animal bites, or ticks; and [sexually transmitted diseases](#). Environmental factors also pose a significant health risk to deployed forces and include sewage, agricultural, and industrial contamination of water and food supplies; extreme cold; and localized air pollution. Additionally, high altitude illnesses are a potentially significant DNBI in the mountainous regions.

## INCREASED REGIONAL DISEASE THREATS

Socialist era exploitation of energy resources and consumption of raw materials combined with a civil conflict have resulted in public health infrastructure damage and extensive environmental contamination. The industrial release of chemicals into water and soil has subsequently contaminated food supplies. Heavy metals have been detected in a variety of foods harvested near industrial sites, and fish (both marine and freshwater) may be contaminated with arsenic and mercury. Hantavirus hemorrhagic fever with renal syndrome is an elevated disease threat that is particularly prevalent in the northern and central Balkan Peninsula, which includes Slovenia, Croatia, Romania, Serbia/Montenegro/Kosovo, and Bosnia/Herzegovina. Hantavirus infection can result from the inhalation of aerosolized dust from soil or other debris that has been contaminated with infected rodent urine or feces. During the warmer months of March through October, an increased threat of tick-borne disease is present. Two diseases of increased concern are tick-borne encephalitis, which is present in Albania, Romania, and Slovenia, and Crimean-Congo hemorrhagic fever, which is present in the rural areas of Serbia/Montenegro/Kosovo.

## FIELD SANITATION TEAM

Each company-sized unit has a Field Sanitation Team (FST) whose members are trained (40-hour course) and fully equipped IAW [AR 40-5](#), [FM 4-25.12](#), and [FORSCOM REG 700-2](#). Know who the members of your FST are, and know how they can assist in preventing medical threats to your health. Become familiar with FST equipment and training.

## FOOD-BORNE AND WATER-BORNE DISEASES

The diseases of greatest risk throughout the region are bacterial diarrhea and hepatitis A associated with contaminated food, water, and/or ice. Do not consume any food, water, or beverages (to include bottled water) that have not been approved by the U.S. military. Assume all non-approved food, ice, and water is contaminated. Water and food items available in this region, including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, bacteria, and viruses. Contamination with human or animal waste is widespread. Even a one-time consumption of these foods or water may cause severe illness. See [GTA 08-05-062](#) for appropriate countermeasures.

## VECTOR-BORNE DISEASES

There are several vector-borne diseases present throughout this region. These diseases are widespread but more common in rural areas during the warmer months, especially March through October. They include [sandfly fever](#) and [leishmaniasis](#) from sand flies; [murine typhus](#) from fleas; [tick-borne encephalitis](#), [Lyme disease](#), and [Crimean-Congo hemorrhagic fever](#) from ticks; and [West Nile fever](#) from mosquitoes. There are many other diseases spread by the bites of mosquitoes, ticks, sand flies, fleas, mites, and lice. Your local medical authority will determine if these diseases or

other vector-borne diseases are a threat in your specific location and provide appropriate countermeasures.

- Use the [DOD Insect Repellent System](#) detailed in [GTA 08-05-062](#) to reduce your risk of acquiring a vector-borne disease. Wear permethrin-treated uniforms with trousers tucked into boots, sleeves rolled down, and undershirt tucked into trousers. Wear DEET on exposed skin.
- When deployed to this region, [sleep under a permethrin-treated bed net](#) to repel insects and further reduce risks of vector-borne diseases. Many insects in this region feed during the night.
- When using both DEET and sunscreen products, apply sunscreen to the skin first so it does not interfere with the effectiveness of the DEET. After 30 minutes to an hour, apply the DEET. This allows the sunscreen to penetrate and bind to the skin first.

## **HOT AND COLD WEATHER INJURIES**

Temperature extremes in this region may impact military operations. Heat injuries are possible during the summer months, especially in individuals not acclimatized to warmer temperatures. Cold injuries are the more serious threat in this region with the effects of cold weather being more severe in high mountainous areas due to reduced oxygen and lower air pressure. When deploying to this region, check with your unit on the requirement for packing the extended cold weather clothing system. See [GTA 08-05-062](#) for appropriate countermeasures

## **WIND AND DUST**

Black winds, named after the large amount of dust carried by the wind, are quite common in the winter along the Danube River Basin. Wind and dust cause health problems, particularly to skin, eyes, throat and lungs. Take care of problems early to avoid infection. Dry air, dust and wind dry out the nose and throat and can also cause nosebleeds, coughing and wheezing. Cracked, chapped fingers reduce manual dexterity. Body areas (such as ears, armpits, groin, elbows, knees, feet, and the area under breasts) that collect dust are susceptible to chafing, abrasion and infection. High winds can turn tent pegs and loose objects into flying missiles (which may not be visible in blowing dust).

- Take a daily sponge bath, using an approved water source.
- Wash your face and eyelids several times per day.
- Carry at least two pairs of glasses and a copy of your prescription. Do not wear contact lenses; [AR 40-63](#) prohibits contact lens use during a military deployment. Breathe through a wet face cloth, or coat the nostrils with a small amount of petroleum jelly to minimize drying of mucous membranes. Protect your lips with lip balm.
- Shield your face with cloth materials to protect from blowing dust.
- Wear goggles to protect your eyes from wind and dust or when traveling in open vehicles.
- Wear gloves and use moisturizing skin lotion to protect your hands.

## HIGH ELEVATIONS

High altitude illnesses can kill. Military operations occurring at elevations over 6,000 feet can seriously impact unit and individual effectiveness. Serious illness or death can result if you ascend rapidly without allowing for acclimatization. Remain well hydrated; individual water requirements are greater at higher altitudes.

- When deployed to high mountain areas, be observant of the common symptoms of mountain sickness: headache, nausea, vomiting, dizziness, fatigue, irritability, and coughing. Seek medical attention immediately if you experience any of these symptoms.
- Pyridostigmine bromide tablets may increase the chance of dizziness or fainting during the first 24 hours at high altitude if you are not acclimatized.
- Lower oxygen levels at high altitudes ("thin air") combined with the heavier work requirements when wearing mission-oriented protective posture (MOPP) gear can increase your risk of high altitude illnesses. When wearing MOPP gear at higher altitudes, you may require more time and concentration to perform assigned tasks.
- For appropriate countermeasures during high altitude operations, see [GTA 08-05-062](#) and [GTA 08-05-060, A Soldier's Guide to Staying Healthy at High Elevations](#).

## HAZARDOUS ANIMALS AND PLANTS

- Several species of highly poisonous snakes, which are well camouflaged and very aggressive, live in the region. Consider any snake encountered as poisonous, and do not handle. Seek immediate medical attention if bitten; untreated snakebites may cause serious illness or death within 1 hour.
- Several species of scorpions and spiders, some with potentially fatal venom, are present throughout the region. If possible, avoid sleeping on the ground. Shake out boots, bedding, and clothing prior to use, and never walk barefoot. If bitten or stung, seek medical attention immediately.
- Some regional plants have thorns, stinging hairs, or toxic resins that may puncture the skin or introduce poison into the skin causing skin irritation, rashes or infections. Avoid skin contact with plants when tactically feasible.
- Contact with the smoke from the burning of these plants can also cause skin rashes and damage to your lungs.
- Clean your clothing after contact with harmful plants. Decontaminate clothing by washing with soap and water.
- Some regional plants may cause systemic poisoning if leaves, berries, flowers, or other plant parts are chewed or swallowed. Symptoms include dizziness, vomiting, irregular heartbeat, and delirium or hallucinations.

## **TOXIC INDUSTRIAL CHEMICALS AND MATERIALS**

When deployed, you may face health risks from industrial chemicals and materials as a result of activities by terrorists or warring parties; accidents related to improper design, maintenance, or operation of indigenous industrial facilities; inadvertent exposure to toxic waste materials in the environment; or improper handling or disposal of hazardous material with which our own forces deploy. The degree of health risks depends upon many parameters. Consult your medical authority for additional information.

## **SKIN DISEASES**

Skin irritations and infections, such as athlete's foot and ringworm, are common medical threats during any deployment and are commonly caused by fungi. The best prevention is to maintain clean, dry skin. See [GTA 08-05-062](#) for additional countermeasure information.

## **SEXUALLY TRANSMITTED DISEASES**

Sexually transmitted diseases are highly prevalent in this region. Gonorrhea, chlamydia, and other infections are common, and may affect a high percentage of personnel who have sexual contact. Hepatitis B and human immunodeficiency virus (HIV) also occur. Though the immediate impact of hepatitis B and HIV on an operation is limited, the long-term impact on your individual health is substantial. See [GTA 08-05-062](#) for appropriate countermeasures.

## **HEARING PROTECTION**

It is essential that you use properly fitted hearing protection during military operations. Exposure to high-intensity noise may cause hearing loss that can adversely affect your combat effectiveness and individual readiness. Good hearing is essential to mission success. If you are a dismounted soldier, the [Combat Arms Earplug](#) (NSN 6515-01-466-2710) will protect you from the impact noise of weapons fire while only slightly interfering with voice communications and detection of combat sounds such as vehicle noise, footfalls in leaves, and the closing of a rifle bolt. While not as effective as the Combat Arms Earplug in preserving your ability to hear important mission-related sounds, noise muffs or standard earplugs are very effective in preventing noise-induced injury. If you are a member of vehicle or helicopter crews, your combat vehicle crew or aircrew helmets have built-in hearing protectors.

## **ORAL HEALTH**

Dental disease is a common problem during deployments due to the challenge of maintaining good oral hygiene. You should deploy with toothbrush, dental floss, and fluoride toothpaste. Daily flossing and twice daily brushing of teeth is the best way to ensure prevention of periodontal disease and to decrease your risk of problems such as



trench mouth and tooth decay. In difficult tactical environments, teeth should be brushed at least once a day. Seek medical attention immediately at the onset of any dental problems.

## **PRE-DEPLOYMENT HEALTH INFORMATION**

- [Complete the Pre-Deployment Health Assessment \(DD FORM 2795\)](#) to assess your state of health before deployment and to assist health care providers in identifying your medical needs and providing present and future medical care to you.
- You will not have access to your health care record during the deployment. The Adult Preventive and Chronic Care Flowsheet ([DD FORM 2766](#)) will be used as your deployment health record. This document will include information on all your immunizations, any medications you are currently taking, and any ongoing medical problems that you may have. When you go through readiness processing, ensure that all appropriate information is documented on your DD FORM 2766. When you return home, this information will be placed in your regular health record.

## **INFORMATION ABOUT YOUR HEALTH CARE WHILE DEPLOYED**

- It is important that you know where to seek health care while deployed. This may or may not be through the same channels as your home station. Ask your chain of command for more information.
- While deployed, you must maintain your health and seek care whenever an illness or injury threatens your ability to complete your tasks. Your unit is depending on you. It is always better to seek care early so that your problems can be documented appropriately and taken care of immediately.

## **POST-DEPLOYMENT HEALTH INFORMATION**

- [Complete the Post-Deployment Health Assessment \(DD FORM 2796\)](#) to assess your state of health after deployment and to assist health care providers in identifying your medical needs and providing present and future medical care to you.
- If you become sick after you return home, tell your physician that you were deployed.
- Complete malaria medications as directed, and receive follow-on medical care/tests as directed.

**Contact your Preventive Medicine or Medical Support Unit for more information.**





*Prepared by:*

**U.S. Army Center for Health Promotion & Preventive Medicine**

**<http://chppm-www.apgea.army.mil>**

**SIPRNet: <http://usachppm1.army.smil.mil>**

**(800) 222-9698/ DSN 584-4375/(410) 436-4375**